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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PATDOCTC@fr.com

**Office Action Summary****Application No.**

09/903,388

**Applicant(s)**

FURBUSH ET AL.

**Examiner**

Narayanswamy Subramanian

**Art Unit**

3695

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 29 December 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-17 and 29-49 is/are pending in the application.
- 4a) Of the above claim(s) 29-33 and 40-49 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-17 and 34-39 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/ISA-43)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_
- Paper No(s)/Mail Date \_\_\_\_\_

**DETAILED ACTION**

1. This office action is in response to applicant's communication of December 29, 2009. Applicant's election of claims 1-17 and 34-39 with traverse in response election/restriction requirement is acknowledged by the examiner. Claims 1-17 and 29-49 are pending of which claims 29-33 and 40-49 have been withdrawn from consideration as being drawn to a non-elected invention. Applicants are respectfully requested to cancel the non-elected claims 29-33 and 40-49 in response to this office action. Claims 1-17 and 34-39 have been examined. The rejections and response to arguments are stated below.

***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-17 and 34-39 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Independent claim 1 recites the limitation "a display coupled to the computing system rendering a graphical user interface rendered on the display". It is not clear if the display is rendering the graphical user interface or the computing system is rendering a graphical user interface. Also the limitation "the graphical user interface allowing the user to form the order and to choose a priority type for how the order interacts with contra side quotes/orders in the trading venue" is interpreted as non-functional descriptive material because it only describes the information in the graphical user interface (GUI). To be functional the display must have structural elements related to "order" characteristics as described. Claim 1 also recites the limitation "allowing the user

Art Unit: 3695

to form the order and to choose a priority type for how the order interacts with contra side quotes/orders in the trading venue”. It is not clear as to what is the outcome of using this feature. Allowing a user to perform a function does not necessarily imply that the function is performed. Claim 1 also recites “a specified quantity if a security”. The examiner has interpreted this limitation to be “a specified quantity of a security”.

Also independent claims 1 and 34 also recite the limitations “that can at least in part satisfy the order” and “how the order interacts with contra side quotes/orders in the trading venue”. It is not clear what the applicants mean by these limitations. The use of the phrase “can” does not further limit the claim. Similarly the use of the phrase “how the order interacts with contra side quotes/orders” does not further limit the claim. The metes and bounds of these limitations and hence the scope of these claims is not clear. Dependent claims are rejected by way of dependency on a rejected independent claim. Appropriate correction is required.

Claim 34 recites “the client station”. This limitation lacks antecedent basis. Dependent claims 35-39 are rejected by way of dependency on a rejected independent claim.

Appropriate correction is required for all these claims.

The art rejections below are interpreted in view of the 112, second paragraph rejections above.

***Claim Rejections - 35 USC § 101***

4. 35 U.S.C. 101 reads as follows:

Art Unit: 3695

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5. Claims 34-39 are rejected under 35 U.S.C. § 101 because the claimed invention is directed to non-statutory Subject matter.

35 USC 101 requires that in order to be patentable the invention must be a **"new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof"** (emphases added).

A claimed process is eligible for patent protection under 35 U.S.C. § 101 if:

"(1) it is tied to a particular machine or apparatus, or (2) it transforms a particular article into a different state or thing. See Benson, 409 U.S. at 70 ('Transformation and reduction of an article 'to a different state or thing' is the clue to the patentability of a process claim that does not include particular machines. '); Diehr, 450 U.S. at 192 (holding that use of mathematical formula in process 'transforming or reducing an article to a different state or thing' constitutes patent-eligible subject matter); see also Flook, 437 U.S. at 589 n.9 ('An argument can be made [that the Supreme] Court has only recognized a process as within the statutory definition when it either was tied to a particular apparatus or operated to change materials to a 'different state or thing' '); *Cochrane v. Deener*, 94 U.S. 780, 788 (1876) ('A process is...an act, or a series of acts, performed upon the subject-matter to be transformed and reduced to a different state or thing.').<sup>7</sup> A claimed process involving a fundamental principle that uses a particular machine or apparatus would not pre-empt uses of the principle that do not also use the specified machine or apparatus in the manner claimed. And a claimed process that transforms a particular article to a specified different state or thing by applying a fundamental principle would not pre-empt the use of the principle to transform any other article, to transform the same article but in a manner not covered by the claim, or to do anything other than transform the specified article." (In re Bilski, 88 USPQ2d 1385, 1391 (Fed. Cir. 2008).

Also noted in Bilski is the statement, "Process claim that recites fundamental principle, and that otherwise fails 'machine-or-transformation' test for whether such claim is drawn to patentable subject matter under 35 U.S.C. §101, is not rendered patent eligible by mere field-of-use limitations; another corollary to machine-or- transformation test is that recitation of specific machine or particular transformation of specific article

Art Unit: 3695

does not transform unpatentable principle into patentable process if recited machine or transformation constitutes mere 'insignificant post-solution activity.'" (*In re Bilski*, 88 *USPQ2d* 1385, 1385 (*Fed. Cir.* 2008)) Examples of insignificant post-solution activity include data gathering and outputting. Furthermore, the machine or transformation must impose meaningful limits on the scope of the method claims in order to pass the machine-or-transformation test. Please refer to the USPTO's "Guidance for Examining Process Claims in view of *In re Bilski*" memorandum dated January 7, 2009,

[http://www.uspto.gov/web/offices/pac/dapp/opla/documents/bilski\\_guidance\\_memo.pdf](http://www.uspto.gov/web/offices/pac/dapp/opla/documents/bilski_guidance_memo.pdf).

It is also noted that the mere recitation of a machine in the preamble in a manner such that the machine fails to patentably limit the scope of the claim does not make the claim statutory under 35 U.S.C. § 101, as seen in the Board of Patent Appeals Informative Opinion *Ex parte Langemyr et al.* (Appeal 2008-1495),

<http://www.uspto.gov/web/offices/dcom/bpai/its/fd081495.pdf>

Claims 34-39 are not tied to a particular machine or apparatus nor do they transform a particular article into a different state or thing, thereby failing the machine-or-transformation test; therefore, claims 34-39 are non-statutory under § 101. While several functions are recited as performed at "a client computing system" it is not clear who or what is performing these respective functions. For example, the functionality may be carried out by a user entering information at the client computing system. In this scenario, the functionality is not performed by a particular machine. Also these specific functionality can be interpreted as mere data gathering (e.g., entering an order, choosing a priority type for the order). These steps being performed at the client computing system is not on par with a machine imposing meaningful limits on the scope of the method claims,

Art Unit: 3695

which is required in order to pass the machine prong of the machine-or-transformation test. Also noted is that many of the more "meaningful" steps of the claimed invention are not clearly executed by a machine, such as the client computing system. At present, the recited machine (i.e., the client computing system) does no more than engage in insignificant extra- or post-solution activity. Dependent claims are rejected by way of dependency on a rejected independent claim. Hence the recited method of claims 34-39 does not qualify as a process under 35 USC 101. (See also *Ex Parte Langemyr*, Appeal 2008-1495, BPAI Decision May 28, 2008).

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1, 2, 17 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Madoff (US Patent 7,617,144 B2).

Claim 1, Madoff teaches a system for an electronic venue for trading of securities (See Madoff Figure 1) comprising: a client station for entering an order to buy or sell a specified quantity if a security, the order of a type that is executable against any participant that can at least in part satisfy at least a portion of the specified quantity of the order (See the entire disclosure of Madoff particularly Abstract, Column 1 line 39 – Column 2 line 63, Column 3 lines 57-64); the client station including: a computing

Art Unit: 3695

system; a display coupled to the computing system rendering a graphical user interface rendered on the display, the graphical user interface allowing the user to form the order and to choose a priority type for how the order interacts with contra side quotes/orders in the trading venue (See the entire disclosure of Madoff particularly Figure 1, Abstract, Column 1 line 39 – Column 2 line 63, Column 3 lines 57-64, the order type is interpreted to include an order priority type).

Claim 2, Madoff teaches the feature wherein the client is coupled to a network, the system further comprising: a server system coupled to the network that receives the order from the client station and executes the order against interest in the trading venue based on the priority type chosen by the user (See the entire disclosure of Madoff particularly Figure 1, Abstract, Column 1 line 39 – Column 2 line 63, Column 3 lines 11-64).

Claim 17, Madoff teaches the feature wherein the order is a non-directed order, which is an order that is not directed to any particular participant (See the entire disclosure of Madoff particularly Abstract, Column 1 line 39 – Column 2 line 63).

Claim 34, Madoff teaches a method for trading of securities in an electronic trading venue, the method comprises: entering at a client computing system an order executable against any participant that can at least in part satisfy the order, the client station including a display that renders a graphical user interface (See the entire disclosure of Madoff particularly Abstract, Column 1 line 39 – Column 2 line 63, Column 3 lines 57-64); choosing through the graphical user interface rendered on the display a priority type for how the order interacts with contra side quotes/orders in the trading venue (See the entire disclosure of Madoff particularly Figure 1, Abstract,



Art Unit: 3695

Column 1 line 39 – Column 2 line 63, Column 3 lines 57-64, the order type is interpreted to include an order priority type).

8. Claims 3-16 and 35-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Madoff (US Patent 7,617,144 B2) in view of NASD Rulemaking Reference (Reference U in PTO-892 mailed March 18, 2008).

Claims 3-16 and 35-39, Madoff teaches a system and a method of claims 1 and 34 respectively as discussed above.

Madoff does not explicitly teach the features included in claims 3-16 and 35-39.

Reference U teaches the features in these claims (See the disclosure of Reference U). It would have been obvious to one of ordinary skill in the art at the time of invention to combine the features taught by Reference U to the invention of Madoff. The motivation to combine is that the combined system will bring together a broad range of participants into a single, integrated electronic system that will maximize the role of each participant to the ultimate benefit of all participants in the Nasdaq Stock Market as a whole - individual and institutional investors, order-entry broker-dealers, market makers, and ECNs (See page 2 of Reference U).

#### ***Response to Arguments***

9. In response to Applicant's arguments "Applicant however traverses because the examiner has not given any reasons why the groups are independent or distinct. The examiner also argued that: there would be a serious search and examination burden if restriction were not required because one or more of the following reasons apply. The examiner has not shown, that any of these reasons exist", the examiner respectfully disagrees. First of all, it is clear from the features of the two inventions that they are

Art Unit: 3695

independent and distinct. Furthermore they have different utilities. A utility of claims 1-17 and 34-39 is choosing through the graphical user interface rendered on the display a priority type for how the order interacts with contra side quotes/orders in the trading venue, whereas utility of claims 29-33 and 40-49 is executing the order against contra-side interest according to a determined priority type. Secondly these inventions require different search strategies and search terms. The inventions require a different field of search (for example, searching electronic resources and employing different search queries) and the prior art applicable to one invention would not likely be applicable to another invention. For these reasons the restriction between the two inventions is maintained by the examiner.

Applicant's other arguments have been fully considered but they are either moot or not persuasive.

### ***Conclusion***

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure are listed on the attached form PTO-892.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Narayanswamy Subramanian whose telephone number is (571) 272-6751. The examiner can normally be reached Monday-Thursday from 8:30 AM to 7:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles R. Kyle can be reached at (571) 272-6746. The fax number for Formal or Official faxes and Draft to the Patent Office is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for

Art Unit: 3695

published applications may be obtained from either Private PMR or Public PAIR. Status information for unpublished applications is available through Private PMR only. For more information about the PMR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Narayanswamy Subramanian/  
Primary Examiner,  
Art Unit 3695

April 23, 2010